

IN THE ABSTRACT:

Please amend the Abstract as indicated below:

Generally, a method and apparatus are disclosed that store sequential data units of a data packet received at an input port in contiguous banks of a buffer in a shared memory, thereby obviating any need for storing linkage information between data units. Data packets can extend through multiple buffers (next-buffer linkage information is much more efficient than next-data-unit linkage information). According to another aspect of the invention, buffer memory utilization can be further enhanced by storing multiple packets in a single buffer. For each buffer, a buffer usage count is stored that indicates the sum (over all packets represented in the buffer) of the number of output ports toward which each of the packets is destined.